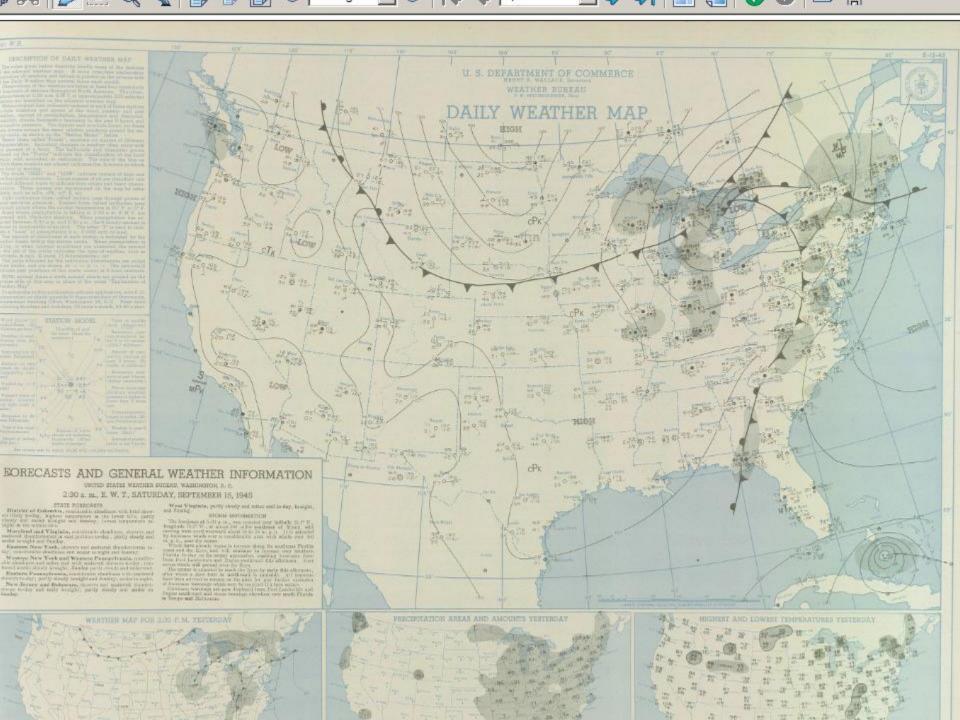
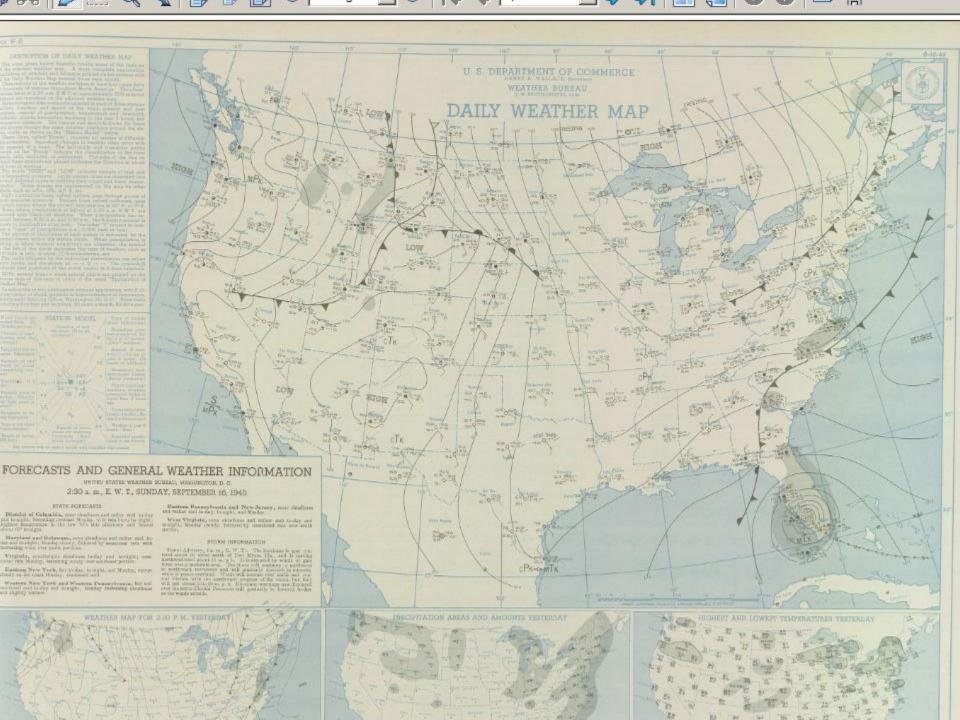
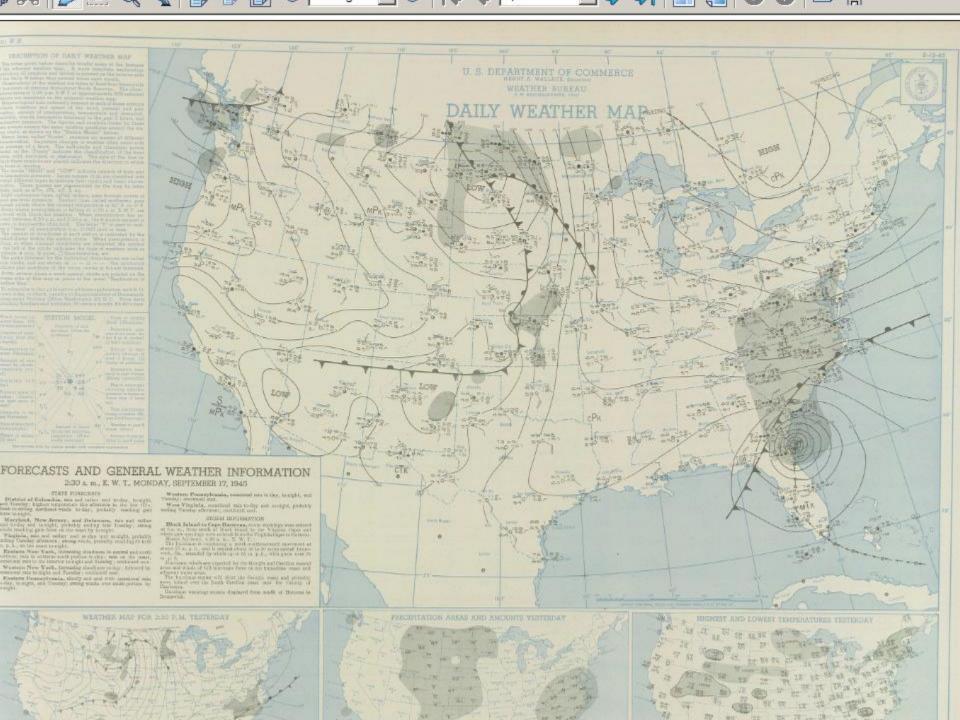
1945 Richmond/South Dade Hurricane

Presented by Robert Molleda at 2007 Florida Governor's Hurricane Conference

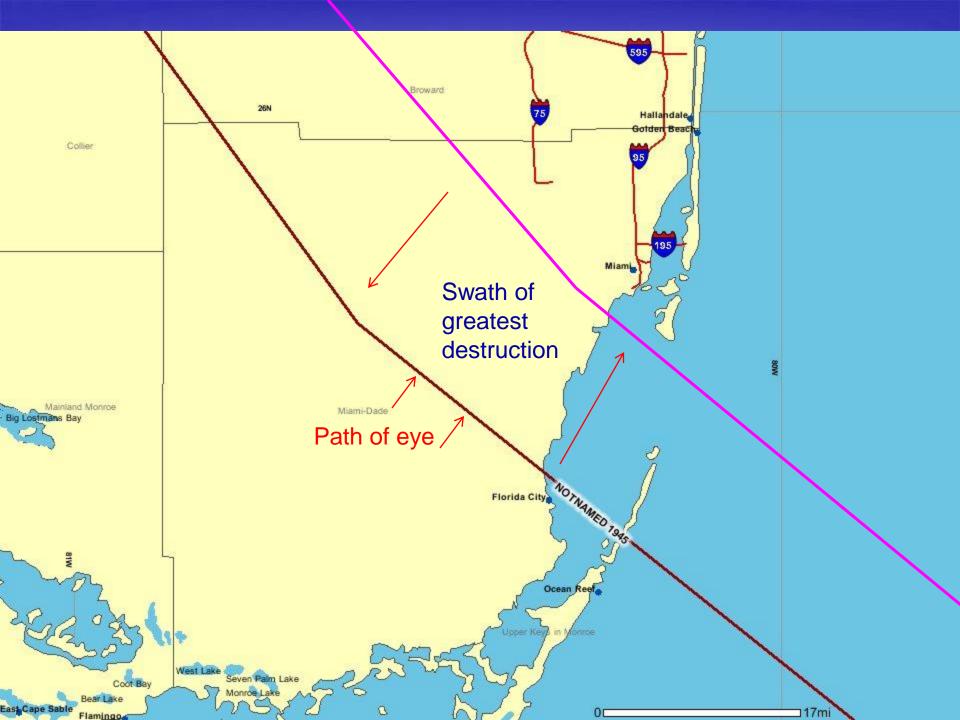












More 1945 Hurricane Stats

- Radius of hurricane winds 60 miles NE and 30 miles SW
- Surge of 10.7 feet on Biscayne Bay at Miami. Widespread bay coastal flooding.
 Only 4.5 feet on Miami Beach oceanfront.
- Damage \$60,000,000 most of it in Dade County.
- Four deaths and 43 injuries in Florida
- 1,632 houses destroyed and over 5,000 damaged



Destructive Decade

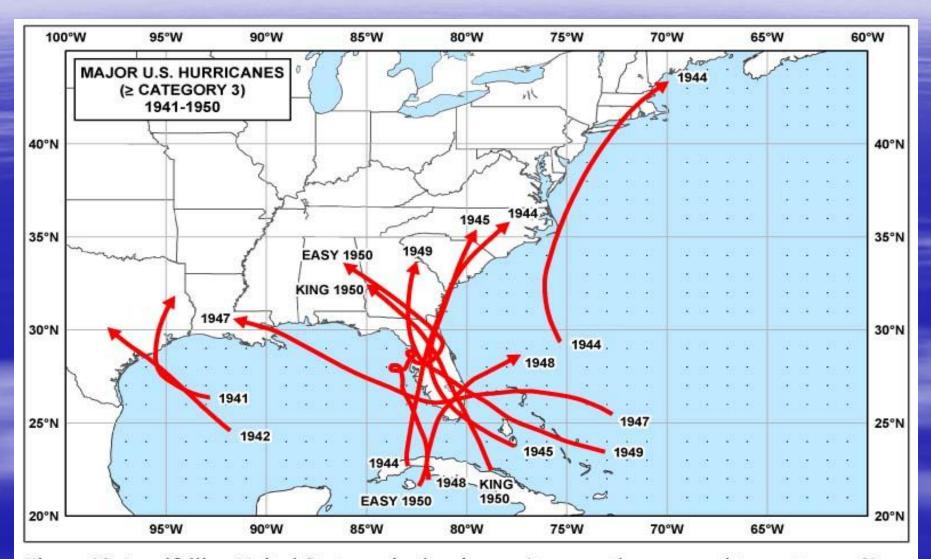


Figure 10. Landfalling United States major hurricanes (stronger than or equal to a category 3) during the period 1941-1950.

1940s: Destructive Decade

 Seven major hurricanes in Florida between 1944-1950 (11 hurricanes overall in that same period).

Richmond Naval Air Station

- Commissioned on Sep 15, 1942, exactly three years before hurricane.
- NAS Richmond largest blimp base on East coast.
- Used to defend from German torpedo attacks off Florida coast during WWII.



NAS Richmond Hangars

- 183 feet high and 1,086 feet long.
- Wood construction with poured concrete pillars and iron doors. Built to withstand 120 mph winds.
- 137 officers and 830 enlisted men stationed to weather the storm.
- 391 aircraft and 100 automobiles at base during storm.
- Data courtesy of Naval Aviation News, May/June 1996.

NAS Richmond Hangars

- Total destruction of three blimp hangars.
- Roof damage was occurring when fire started.
- Extensive survey by structural engineers of damage to hangars established similar wind speeds to those estimated at Homestead (150 mph gusts).

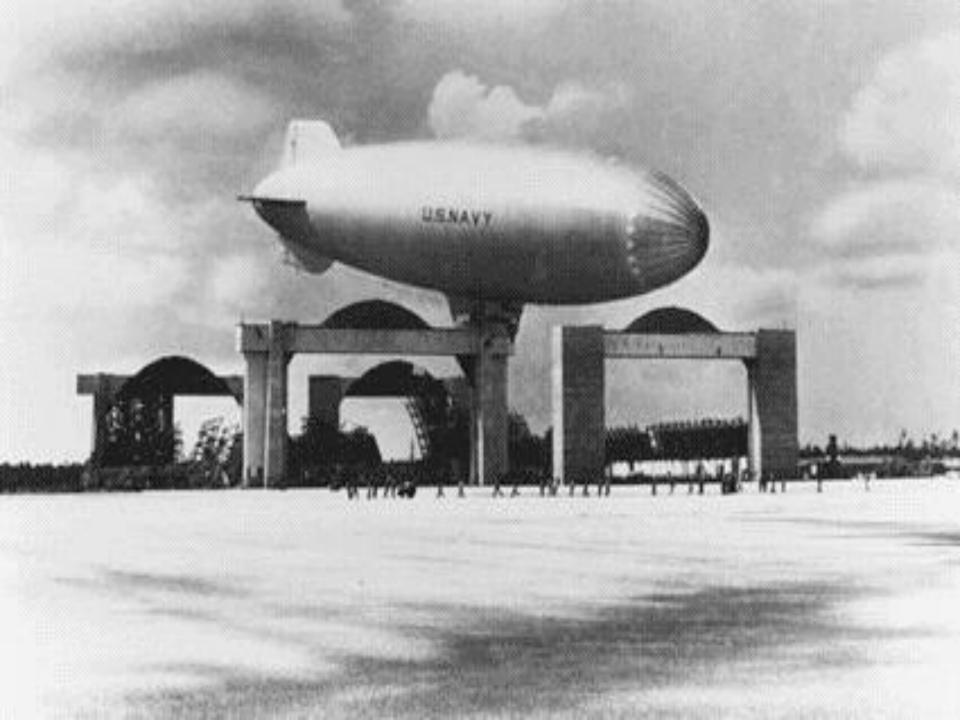
Photo Credits

 Past and present photos shown in next several slides courtesy of Abandoned & Little Known Airfields: http://www.airfieldsfreeman.com/FL/Airfields_FL_Miami_S.htm









NAS Richmond After Hurricane

- Base closed down, eventually became site of CIA Cuba operations in the 1960s.
- Current site of Gold Coast Railroad Museum near Miami Metrozoo.







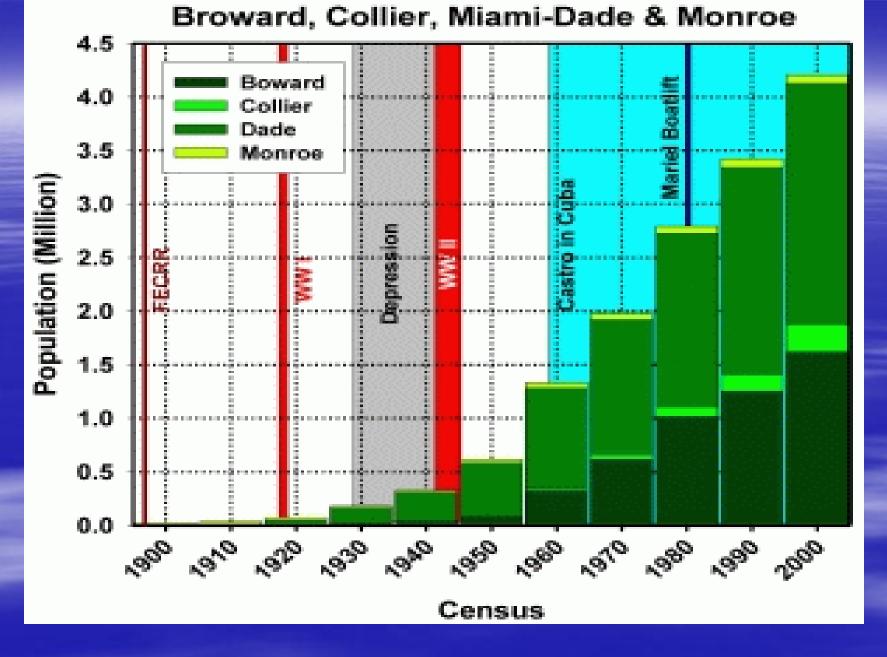
NAVAL AIR STATION RICHMOND

WWII L.T.A. FACILITY

At this site, on 15 September 1942, the United States Navy established a 2.000 acre (810 hectare) lighter-than-air facility. The Navy constructed 3 huge hangars, each 17 stories (175 feet/54 meters) high, 297 feet (110.5 meters) wide, and 1.088 feet (404.8 meters) in length. Among the largest wooden structures in the world, each covered about 7 acres (2.8 hectares). This base was home to Fleet Airship Wing 2 and Airship Patrol Squadron ZP-ZI, consisting of 25 "K" class blimps. Airships from NAS Richmond searched for German submarines over the Atlantic Ocean. Gulf of Mexico, and the Caribbean Sea. Other station activities included training homing pigeons, helium equipment operators, and night torpedo bomber crews. Exactly 3 years to the date of the commissioning of NAS Richmond, a severe hurricane and resulting fire destroyed all 3 hangars containing 368 military and civilian aircraft, 100 automobiles and 25 airships. Winds of 170 mph/272 kmh to 196 mph/309 kmh were recorded at nearby Homestead Air Base. The facility was never rebuilt. In this area of the base you can see the remaining concrete supports for the 51 wooden truss arches of hangar number 1 and the sole remaining massive main door support.

PLACED BY THE COLD COAST HAILROAD MUSEUM WHICH HAD ITS BEGINNINGS ON THIS SITE IN 1957.

What if 1945 Richmond Hurricane Struck Today?



aps "="

Damage Estimates

- Normalized damages plus insured losses: \$40 billion (#10 all-time) according to AIR Worldwide Corp. research and modeling.
- Hurricane Andrew struck same general area in 1992.
- Huge population increase in past 5-10 years.